



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: **VA0000281**
Effective Date:
Expiration Date: February 15, 2012

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTION DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit as set forth herein.

Owner: **Nanochemonics Holdings, LLC**
Facility Name: **Nanochemonics Holdings, LLC**
City: Pulaski
County: Pulaski
Facility Location: 4 Magnox Drive

The owner is authorized to discharge to the following receiving stream:

Stream: Peak Creek
River Basin: New River
River Subbasin: NA
Section: 2
Class: IV
Special Standards: v, NEW-5

Steven A. Dietrich, P.E.
Regional Director

Date

A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall 001. This discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u> <u>Sample Type</u>
Flow (MGD)	NL	NA	NA	NL	Continuous TIRE
pH (Standard Units)	NA	NA	6.0	9.0	Continuous Recording
Total Suspended Solids ^a	30 mg/L	136 kg/d	NA	45 mg/L	1/3 Months 24 HC
Sulfate ^d	NL mg/L	NA	NA	NL mg/L	1/3 Months 24 HC
Ammonia as Nitrogen ^{a,b}	NL mg/L	NA	NA	NL mg/L	1/3 Months 24 HC
Temperature	NA	NA	NA	29 °C	1/3 Months IS
Total Dissolved Solids ^d	NL mg/L	NA	NA	NL mg/L	1/3 Months 24 HC
Sodium, Total ^d	NL mg/L	NA	NA	NL mg/L	1/3 Months 24 HC
Zinc, Total Recoverable ^a	50 µg/L	NA	NA	150 µg/L	1/3 Months 24 HC
Copper, Total Recoverable ^a	11 µg/L	NA	NA	16 µg/L	1/3 Months 24 HC
Chromium, Total Recoverable ^a	74 µg/L	NA	NA	1500 µg/L	1/3 Months 24 HC
pH excursion time, total ^e	NA	NA	NA	446 min.	Continuous Recording
pH excursion time, individual ^e	NA	NA	NA	60 min.	Continuous Recording
Iron, Total Recoverable ^a	NL mg/L	NA	NA	1.0 mg/L	1/3 Months 24 HC
Whole Effluent Toxicity ^e	NA	NA	NA	2.73 TU ₆	1/3 Months 24 HC
Cobalt, Dissolved ^d	NL µg/L	NA	NA	NL µg/L	1/3 Months 24 HC

NL = No Limitation with monitoring required NA= Not Applicable 24 HC = 24 hour composite IS = Immersion Stabilization TIRE = totalizing, indicating, recording equipment

- a. See Part I.B.1 for quantification levels and reporting requirements.
- b. Ammonia as nitrogen shall be monitored once per month for 12 months.
- c. See Part I.B.7 for pH special condition. The number of individual excursions lasting more than 60 minutes shall be reported in the monthly report excursions column. Any pH measurement outside the range of 4.0 S.U. to 11.0 S.U. shall be reported as a violation.
- d. During months when whole effluent toxicity testing is conducted, each sample used to conduct toxicity testing shall be analyzed for these parameters. Refer to Part I.B.14 for additional testing requirements and toxicity testing during the first five full months.
- e. See Part I.C for whole effluent toxicity testing requirements and toxicity testing schedule. See Part I.B.14 for additional testing requirements during the first five full months.
- f. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. Effluent Limitations and Monitoring Requirements – Storm Event Monitoring

2. During the period beginning with permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall 901. This discharge shall be limited and monitored by the permittee as specified below:

<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>		
<u>EFFLUENT CHARACTERISTICS</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type^b</u>
pH (Standard Units)	NA	NA	6.0	9.0	1/Year	Grab
Total Suspended Solids ^a	NA	NA	NA	45 mg/L 204 kg/d	1/Year	Grab
Nitrogen, Total (mg/L) ^c	NA	NA	NA	NL	1/Year	Grab
Temperature	NA	NA	NA	29 °C	1/Year	IS
Zinc, Total Recoverable ^a	NA	NA	NA	150 µg/L	1/3 Months	Grab
Flow (MG)	NA	NA	NA	NL	1/3 Months	Estimate
Copper, Total Recoverable ^a	NA	NA	NA	16 µg/L	1/Year	Grab
Chromium, Total Recoverable ^a	NA	NA	NA	1500 µg/L	1/Year	Grab
Iron, Total Recoverable ^a	NA	NA	NA	1.0 mg/L	1/Year	Grab
Aluminum, Total Recoverable (µg/L)	NA	NA	NA	NL	1/Year	Grab
NL = No Limitation with monitoring required				1/Year = Once every 12 months		
NA = Not Applicable				IS = Immersion Stabilization		

- See Part I.B.1 for quantification levels and reporting requirements.
- See monitoring requirements in Part I.D.1 for sample type requirements.
- Total nitrogen, which is the sum of TKN and nitrates plus nitrites, shall be derived from the results of those tests.
- In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.
- There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. Limitations and Monitoring Requirements – Storm Event Monitoring

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water from outfall 002, 003, 004 (storm water runoff from manufacturing roof and area east of Peak Creek). These discharges shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTICS	Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type ^c
pH (Standard Units)	NA	NA	NL	NL	1/Year	Grab
Nitrogen, Total (mg/L) ^a	NA	NA	NA	NL	1/Year	Grab
Zinc, Total Recoverable (µg/L) ^b	NA	NA	NA	NL	1/3 Months	Grab
Flow (MG)	NA	NA	NA	NL	1/3 Months	Estimate
Copper, Total Recoverable (µg/L) ^b	NA	NA	NA	NL	1/Year	Grab
Iron, Total Recoverable (mg/L) ^b	NA	NA	NA	NL	1/Year	Grab
Aluminum, Total Recoverable (µg/L)	NA	NA	NA	NL	1/Year	Grab
NL = No Limitation with monitoring required	NA = Not Applicable		1/Year = Once every 12 months			

- Total nitrogen, which is the sum of TKN and nitrates plus nitrites, shall be derived from the results of those tests.
- See Part I.B.1.1 for quantification levels and reporting requirements.
- See monitoring requirements in Part I.D.1 for sample type requirements
- In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.
- Outfalls 002, 003, and 004 are to be monitored on a rotating basis, beginning with outfall 002 so that each outfall is sampled at least once during the permit term.
- There shall be no discharge of floating solids or visible foam in other than trace amounts from the drainage area associated with industrial activity.
- There shall be no discharge of process wastewater from this outfall.

B. Special Conditions**1. Compliance Reporting under Part I.A****a. Quantification Levels**

The quantification levels (QL) shall be as follows:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
Ammonia as Nitrogen	0.10 mg/L
Chromium, Total Recoverable	10 µg/L
Cobalt, Dissolved	5 µg/L
Copper, Total Recoverable	2.0 µg/L
Nitrogen, Total	0.50 mg/L
Iron, Total Recoverable	0.10 mg/L
Total Suspended Solids	1.0 mg/L
Zinc, Total Recoverable	2.0 µg/L

c. Reporting**(1) Monthly Average**

Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.A shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed above shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated even if the calculated concentration is less than the QL. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity; otherwise use the calculated concentration to calculate the quantity.

(2) Daily Maximum

Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.A shall be determined as follows: All concentration data below the QL listed in 1.a above shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum

B. Special Conditions

1. **Compliance Reporting under Part I.A**

b. Reporting

(2) Daily Maximum (Continued)

value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum even if the calculated concentration is less than the QL. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity; otherwise use the calculated concentration to calculate the quantity.

(3) Any single datum required shall be reported as "<QL" if it is less than the QL listed in Part I.C.1.a above.

(4) Significant Digits

The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up to or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

2. **Notification Levels**

The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels.

(1) One hundred micrograms per liter;

(2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

B. Special Conditions

2. **Notification Levels (Continued)**

- (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.

3. **Operations and Maintenance Manual Requirement**

A revised Operations and Maintenance (O&M) Manual shall be submitted for approval to the DEQ Regional Office by **April 10, 2009**. The permittee will maintain an accurate, approved operation and maintenance manual for the treatment works. A daily log of these inspections shall be maintained by the permittee. This manual shall include, but not necessarily be limited to, the following items as appropriate:

- a. Techniques to be employed in the collection, preservation, and analysis of effluent samples;
- b. Discussion of Best Management Practices, if applicable;
- c. Treatment works design, treatment works operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping;
- d. A Sludge Management Plan

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within **90 days** of the effective date

B. Special Conditions

3. **Operations and Maintenance Manual Requirement (Continued)**

d. A Sludge Management Plan

of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit.

e. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.B.4 that will prevent these materials from reaching state waters.

f. Procedures for measuring and recording the duration and volume of treated wastewater discharged.

4. **Materials Handling/Storage**

Any and all products, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such products, materials, industrial wastes, and/or other wastes to State Waters, except as expressly authorized.

5. **Cooling Water and Boiler Additives**

a. If at any time during the life of the permit, the permittee decides to treat any noncontact cooling water unit(s) and/or boiler systems with chemical additives, the following requirements shall be satisfied.

Thirty (30) days prior to implementing any chemical addition to the cooling water and/or boiler equipment, the permittee shall notify the DEQ Regional Office, in writing, of the following:

- (1) Chemical additives to be employed and their purpose. Provide, for review, a Material Safety Data Sheet (MSDS) for each proposed additive.
- (2) Schedule of additive usage and,
- (3) Wastewater treatment and/or retention to be provided during the use of additives.

B. Special Conditions

5. **Cooling Water and Boiler Additives (Continued)**

- b. Should the addition of treatment chemicals significantly alter the characteristics of the effluent from the cooling water unit(s) or if their usage becomes persistent or continuous, this permit shall be modified, or alternatively revoked and reissued to include appropriate limitations or conditions.

6. **Nutrient Enriched Waters Reopener**

This permit shall be modified or alternatively revoked and reissued to include new or alternative nutrient limitations should the Board adopt nutrient standards for Claytor Lake and tributary river basins, or if a future water quality regulation, statute, or water quality management plan requires new or alternative nutrient control.

7. **Continuous pH Excursions**

The total time limit for pH excursions of 7 hours and 26 minutes in any calendar month specified in 40 CFR 401.17 shall apply to excursions at Outfall 001. The time limit of 60 minutes for an individual excursion shall also apply to Outfall 001. The time limitations only apply to pH excursions outside the range 6.0 to 9.0 S.U. but within the range 4.0 to 11.0 S.U. All excursions exceeding the range 4.0 to 11.0 S.U. are violations of this permit and shall be reported in accordance with Part II.I.

8. **Treatment Works Closure Plan**

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ a closure plan for the treatment works. The plan shall address liquid and sludge removal, structure and pipe removal, steps to prevent unauthorized access, fill materials, final grading, and seeding. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation.

In the event of facility closure, the permittee shall sample once for each foot of drawdown, and when the discharge no longer meets permit limits, the discharge shall cease and the rest of the contents of the lagoon shall be pumped and hauled to another, permitted facility for treatment and disposal.

9. **Instream Flow Monitoring**

The permittee shall measure flow below the intake but upstream of outfall 001 using an approved continuous recording flow monitoring device.

B. Special Conditions

9. **Instream Flow Monitoring (Continued)**

- a. The permittee shall report daily maximum, average monthly Instream Waste Concentrations (IWCs), and minimum stream flow with the monthly discharge monitoring reports.
- b. The permittee shall continue to implement the Contingency Plan approved on June 21, 1996. The permittee shall notify DEQ of the dates that the Plan is activated with the monthly discharge monitoring report. Compliance with the approved Plan is an enforceable condition through this permit.

10. **Qualitative Benthic Macroinvertebrate Study**

Annual benthic macroinvertebrate studies shall be performed on Peak Creek to assess impacts of all permitted discharges and shall be conducted between August 15 and December 15. The study protocol shall use the most recent EPA protocols for characterizing benthic communities, currently named "Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers." Study design changes in the study protocol, dated August 10, 2000, shall be approved by DEQ staff prior to initiation of monitoring. The benthic reports shall be due 3/10/09, 3/10/10, 3/10/11, and 2/10/12.

11. **Storm Water Management Evaluation**

The Storm Water Pollution Prevention Plan (SWPPP) which is to be developed and maintained in accordance with Part I.E of this permit, shall have a goal of reducing pollutants discharged at all the regulated storm water outfalls. One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practicable, the following pollutant in the outfalls noted below.

<u>Outfall No.</u>	<u>Pollutants</u>
002 /003/004/901	total recoverable zinc

By **February 10th** of each year, the permittee shall submit to the DEQ Regional Office an annual report which includes all the storm water pollutant-specific data from the outfalls included in this condition along with a summary of any steps taken to modify either the SWPPP or any best management practices (BMPs) based on the monitoring data. The report shall include a comparison of the data with the decision criteria and/or any other applicable limit. The decision criteria are the target values to be used as a measure of whether the BMPs are effective. If the BMPs are not effective, the best management practices in the Storm Water Pollution Prevention Plan shall be modified as necessary.

B. Special Conditions

12. **Total Maximum Daily Load (TMDL) Reopener**

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocation, limits, or conditions on the facility that are not consistent with permit requirements.

13. **Form 2F Monitoring**

In accordance with the requirements of VPDES application, the permittee shall submit Part VII of Form 2F for storm water outfalls 002, 003, 004, and 901 within 6 months of the effective date of the permit.

14. **Whole Effluent Toxicity Characterization Study**

Beginning with the first full month, the permittee shall conduct monthly acute and chronic whole effluent toxicity from outfall 001 for five months. These tests shall be conducted using *Ceriodaphnia dubia* and *Pimephales promelas* in accordance with the specifications given in Part I.C of the permit. Each 24-hour composite sample used to conduct toxicity testing shall also be analyzed for total dissolved solids, sulfate, total sodium, and total dissolved cobalt. The analysis results and the laboratory summary data sheets shall be submitted for these parameters. The chemical analysis results and whole effluent toxicity testing for each month are due on the 10th of the month following testing.

C. Whole Effluent Toxicity Limitation and Monitoring Requirements

1. The chronic Whole Effluent Toxicity (WET) limitation for outfall 001 is 2.73 TU_c.
2. In accordance with the schedule in 5. below, the permittee shall conduct five monthly chronic toxicity tests using 24-hour flow-proportioned composite samples of final effluent collected from outfall 001. The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC

C. Whole Effluent Toxicity Limitation and Monitoring Requirements

for DMR reporting. The highest TU_c of the species shall be reported on the DMR. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

3. Following completion of five valid tests for outfall 001, the permittee shall begin quarterly chronic testing within three months of the last completed toxicity test. The test organism shall be identified as the most sensitive species from the monthly chronic tests approved by the DEQ staff.
4. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.
5. Reporting Schedule

The permittee shall report the results on the DMR and supply two copies of the toxicity test reports specified in this special condition in accordance with the schedule that follows.

Period	Compliance Periods	DMR Submission Dates
Month 1	By 1/31/09	2/10/09
Month 2	By 2/29/09	3/10/09
Month 3	By 3/31/09	4/10/09
Month 4	By 4/30/09	5/10/09
Month 5	By 5/31/09	6/10/09
Quarter 1	By 8/31/09	9/10/09
Quarter 2-	Conduct subsequent quarterly tests in accordance with increments described.	10 th of month following completion of test

D. General Storm Water Special Conditions

1. **Sample Type**

For all storm water monitoring required in Part I.A or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that is greater than 0.10 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.10 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

2. **Recording of Results**

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

- a. The date and duration (in hours) of the storm event(s) sampled;
- b. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
- c. The duration between the storm event sampled and the end of the previous measurable (greater than 0.10 inch rainfall) storm event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. A summarization of this information shall also be submitted with the DMRs.

3. **Sampling Waiver**

When a permittee is unable to collect storm water samples required in Part I.A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a

D. General Storm Water Special Conditions

3. **Sampling Waiver (Continued)**

separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

4. **Representative Discharges**

When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes substantially identical effluents are discharged, the permittee may test the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that: (1) the representative outfall determination has been approved by DEQ prior to data submittal; and, (2) the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents.

5. **Quarterly Visual Examination of Storm Water Quality**

- a. The permittee must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination must be made during daylight hours (eg., normal working hours). If no storm water resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II K of this permit.
- b. Visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from the facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All samples (except snowmelt samples) must be collected from the discharge resulting

D. General Storm Water Special Conditions

5. **Quarterly Visual Examination of Storm Water Quality (Continued)**

- b. from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) event. The 72-hour storm event interval is waived where the preceding measurable storm did not yield a measurable discharge, or if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred that resulted in storm water runoff during that quarter. The documentation must be signed and certified in accordance with Part II.K.
- c. Visual examination reports must be maintained onsite with the Storm Water Pollution Prevention Plan (SWPPP). The report must include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
- d. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent) shall be provided in the plan.
- e. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may

D. General Storm Water Special Conditions

5. **Quarterly Visual Examination of Storm Water Quality (Continued)**

- e. prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
- f. Should the permittee eliminate exposure to one or more storm water outfalls, a general no-exposure form may be submitted to the DEQ Regional Office certifying that the outfall does not have a potential to be exposed to industrial activity. Upon approved by the DEQ staff, the permittee may discontinue quarterly visual examinations for the storm water outfall(s) deemed no-exposure.

6. **Allowable Non-storm Water Discharges**

- a. The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with 6.b, below.
 - (1) Discharges from fire fighting activities;
 - (2) Fire hydrant flushings;
 - (3) Potable water including water line flushings;
 - (4) Uncontaminated air conditioning or compressor condensate;
 - (5) Irrigation drainage;
 - (6) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
 - (7) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - (8) Routine external building wash down which does not use detergents;
 - (9) Uncontaminated ground water or spring water;
 - (10) Foundation or footing drains where flows are not contaminated with process materials such as solvents;
 - (11) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
- b. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:
 - (1) Identification of each allowable non-storm water source;

D. General Storm Water Special Conditions

6. **Allowable Non-storm Water Discharges (Continued)**

- (2) The location where the non-storm water is likely to be discharged; and
 - (3) Descriptions of any BMPs that are being used for each source.
- c. If mist blown from cooling towers is included as one of the allowable non-storm water discharges from the facility, the permittee must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower, and must select and implement BMPs to control such discharges so that the levels of cooling tower chemicals in the discharges would not cause or contribute to a violation of an applicable water quality standard.

7. **Releases of Hazardous Substances or Oil in Excess of Reportable Quantities**

The discharge of hazardous substances or oil in the storm water discharge(s) from the facility shall be prevented or minimized in accordance with the storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. The permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 or Section 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302 occurs during a 24 hour period.

- a. The permittee is required to notify the Department in accordance with the requirements of Part II.H as soon as he or she has knowledge of the discharge;
- b. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
- c. The SWPPP required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

8. **Additional Requirements for Salt Storage**

Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to state waters or the discharges from the piles are authorized under another permit.

E. Storm Water Pollution Prevention Plan

A storm water pollution prevention plan (SWPPP) for the facility was required to be developed and implemented for the facility. The existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this section. The plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control (ESC) plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part I.E.2 (Contents of Plan). If an ESC plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation 4 VAC 50-30. All plans incorporated by reference into the SWPPP become enforceable under this permit.

1. **Deadlines for Plan Preparation and Compliance**

- a. The facility shall prepare any necessary revisions required by the industrial sector specific requirements and implement the revisions to the plan as expeditiously as practicable, but **not later than 270 days** from the effective date of the permit.
- b. Measures That Require Construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but **no later than 3 years** after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

E. Storm Water Pollution Prevention Plan

1. **Deadlines for Plan Preparation and Compliance**

- c. Extensions. Upon a showing of good cause, the director may establish a later date in writing for the preparation and compliance with the SWPPP.

2. **Contents of the Plan**

The contents of the SWPPP shall comply with the requirements listed below and those in Part I.E.8. The plan shall include, at a minimum, the following items.

- a. Pollution Prevention Team. The plan shall identify the staff individuals by name or title that comprise the facility's storm water pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, maintaining, and revising the facility's SWPPP. Responsibilities of each staff individual on the team must be listed.
- b. Site Description. The SWPPP shall include the following:
- (1) Activities at the Facility. A description of the nature of the industrial activities at the facility.
 - (2) General Location Map. A general location map (eg., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
 - (3) Site Map. A site map identifying the following:
 - (a) Directions of storm water flow (eg., use arrows to show which ways storm water will flow);
 - (b) Locations of all existing structural BMPs;
 - (c) Locations of all surface water bodies;
 - (d) Location of potential pollutant sources identified under Part I.E.2.c and where significant materials are exposed to precipitation;
 - (e) Locations where major spills or leaks identified under Part I.E.2.d have occurred;

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

- (f) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; and liquid storage tanks;
 - (g) Locations of storm water outfalls and an approximate outline of the area draining to each outfall;
 - (h) Location and description of non-storm water discharges;
 - (i) Locations of the following activities where such activities are exposed to precipitation: processing and storage areas; access roads, rail cars and tracks; the location of transfer of substance in bulk; and machinery; and
 - (j) Location and storage of runoff from adjacent property containing significant quantities of pollutants of concern to the facility (the permittee may include an evaluation of how the quality of the storm water running onto the facility impacts the facility's storm water discharges).
- (4) Receiving Waters and Wetlands. The name of the nearest receiving water(s), including intermittent streams, dry sloughs, arroyos, and the areal extent and description of wetland sites that may receive discharges from the facility.
- c. Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, intermediate products, byproducts, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, or waste product. For each, separate area identified, the description must include:
 - (1) Activities in Area. A list of activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

- (2) Pollutants. A list of the associated pollutant(s) or pollutant parameter(s) (e.g., crankcase oil, iron, biochemical oxygen demand, pH, etc.) for each activity. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed in a manner to allow exposure to storm water between the time of three years before being covered under this permit and the present.
- d. Spills and Leaks. The SWPPP must clearly identify areas where potential spills and leaks that can contribute pollutants to storm water discharges can occur and their accompanying drainage points. For areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility to be covered under this permit, the plan must include a list of significant spills and leaks of toxic or hazardous pollutants that occurred within the 3 year period immediately prior to the date of submission of the application for this permit. The list must be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills or leaks include releases of oil or hazardous substances in excess of reportable quantities, and may also include releases of oil or hazardous substances that are not in excess of reporting requirements.
- e. Sampling Data. The plan must include a summary of existing discharge sampling data taken at the facility and must also include a summary of sampling data collected during the term of this permit;
- f. Storm Water Controls. The SWPPP shall include a description of storm water management controls appropriate for the facility. The description of controls shall address the following minimum components:
 - (1) Description of Existing and Planned BMPs. The plan shall describe the type and location of existing nonstructural and structural best management practices (BMPs) selected for each of the areas where industrial materials or activities are exposed to storm water. All the areas identified in Part I.E.2.c (Summary of Potential Pollutant Sources) should have a BMP(s) identified for the area's discharges. For areas where BMPs are not currently in place, include a description of appropriate BMPs that will be used to control pollutants in storm water discharges. Selection of BMPs should take into consideration:
 - (a) The quantity and nature of the pollutants, and their potential to impact the water quality of receiving waters;

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

- (b) Opportunities to combine the dual purposes of water quality protection and local flood control benefits, including physical impacts of high flows on streams (e.g., bank erosion, impairment of aquatic habitat, etc.);
- (c) Opportunities to offset the impact of impervious areas of the facility on ground water recharge and base flows in local streams, taking into account the potential for ground water contamination.

(2) BMP Types to be Considered. The permittee must consider the following types of structural, nonstructural and other BMPs for implementation at the facility. The SWPPP shall describe how each BMP is, or will be, implemented. If this requirement was fulfilled with the area-specific BMPs identified under Part I.E.2.f(1), then the previous description is sufficient. However, many of the following BMPs may be more generalized or non-site specific and therefore not previously considered. If the permittee determines that any of these BMPs are not appropriate for the facility, an explanation of why they are not are not appropriate shall be included in the plan. The BMP examples listed below are not intended to be an exclusive list of BMPs that may be used. The permittee is encouraged to keep abreast of new BMPs or new applications of existing BMPs to find the most cost effective means of permit compliance for the facility. If BMPs are being used or planned at the facility that are not listed here (e.g., replacing a chemical with a less toxic alternative, adopting a new or innovative BMP, etc.) descriptions of them shall be included in this section of the SWPPP.

(a) Nonstructural BMPs

- (i) Good Housekeeping. The permittee must keep all exposed areas of the facility in a clean, orderly manner where such exposed areas could contribute pollutants to storm water discharges. Common problem areas include around trash containers, storage areas, and loading docks. Measures must also include a schedule for regular pickup and disposal of garbage and waste materials; routine inspections for leaks and conditions of drums, tanks, and containers.

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

- (ii) Minimizing Exposure. Where practicable, industrial materials and activities should be protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, or runoff.
- (iii) Preventive Maintenance. The permittee must have a preventive maintenance program that includes timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins), as well as inspection, testing, maintenance, and repairing of facility equipment and systems to avoid breakdowns or failures that could result in discharges of pollutants to surface waters.
- (iv) Spill Prevention and Response Procedures. The plan must describe the procedures that will be followed for cleaning up spills or leaks. The procedures and necessary spill response equipment must be made available to those employees who may cause or detect a spill or leak. Where appropriate, the plan must include an explanation of existing or planned material handling procedures, storage requirements, secondary containment, and equipment (e.g., diversion valves), that are intended to minimize spills or leaks at the facility. Measures for cleaning up hazardous material spills or leaks must be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265.
- (v) Routine Facility Inspections. Facility personnel who are familiar with the industrial activity, the BMPs, and the storm water pollution prevention plan shall be identified to inspect all areas of the facility where industrial materials or activities are exposed to storm water. These inspections are in addition to or as part of the comprehensive site evaluation required under Part I.E.5, and must include an evaluation of the existing storm water BMPs. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

are specified elsewhere in the permit. Any deficiencies in the implementation of the SWPPP that are found must be corrected as soon as practicable, but no later than within 14 days of the inspection, unless permission for a later date is granted in writing by the director. The results of the inspections must be documented in the SWPPP, along with any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

- (vi) Employee Training. The SWPPP must describe the storm water employee training program for the facility. The description should include the topics to be covered, such as spill response, good housekeeping, and material management practices, and must identify periodic dates for such training (e.g., every six months during the months of July and January). Employee training must be provided for all employees that work in areas where industrial materials or activities are exposed to storm water, and for employees that are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance people). The training should inform employees of the components and goals of the SWPPP.
- (b) Structural BMPs
 - (i) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction), or other factors, have a potential for significant soil erosion. The plan must identify structural, vegetative, and/or stabilization BMPs that will be implemented to limit erosion.
 - (ii) Management of Runoff. The plan shall describe the traditional storm water management practices (permanent structural BMPs other than those that control the generation or source(s) of pollutant(s) that currently exist or that are planned for the facility. These types of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm

E. Storm Water Pollution Prevention Plan

2. **Contents of Plan**

water discharges from the site. The plan shall provide that all measures that the permittee determines to be reasonable and appropriate, or are required by a state or local authority shall be implemented and maintained. Factors for the permittee to consider when selecting appropriate BMPs should include:

- (A) The industrial materials and activities that are exposed to storm water, and the associated pollutant potential of those materials and activities; and
- (B) The beneficial and potential detrimental effects on surface water quality, ground water quality, receiving water base flow (dry weather stream flow), and physical integrity of receiving waters.

Structural measures should be placed on upland soils, avoiding wetland and floodplains, if possible.

Structural BMPs may require a separate permit under Section 404 of the CWA before installation begins.

- (iii) Example BMPs. BMPs that could be used include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices).
- (iv) Other Controls. Off-site vehicle tracking of raw, final, or waste materials or sediments, and the generation of dust must be minimized. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas must be minimized. Velocity dissipation devices (or equivalent measures) must be placed at discharge locations and along the length of any outfall channel if they are necessary to provide a non-erosive flow velocity from the structure to a water course.

F. Storm Water Pollution Prevention Plan3. **Maintenance**

All BMPs identified in the SWPPP must be maintained in effective operating condition. If site inspections required by Part I.E.5 identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. In the case of nonstructural BMPs, the effectiveness of the BMP must be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

4. **Comprehensive Site Compliance Evaluation**

The permittee shall conduct facility inspections (site compliance evaluations) at least once a year. The inspections must be done by qualified personnel who may be either facility employees or outside consultants hired by the facility. The inspectors must be familiar with the industrial activity, the BMPs and the SWPPP, and must possess the skills to assess conditions at the facility that could impact storm water quality, and to assess the effectiveness of the BMPs that have been chosen to control the quality of the storm water discharges. If more frequent inspections are conducted, the SWPPP must specify the frequency of inspection.

a. Scope of the Compliance Evaluation. Inspections must include all areas where industrial materials or activities are exposed to storm water, as identified in Part I.E.2.c, and areas where spills and leaks have occurred within the past three years. Inspectors should look for:

- (1) Industrial materials, residue, or trash on the ground that could contaminate or be washed away in storm water;
- (2) Leaks or spills from industrial equipment, drums, barrels, tanks, or similar containers;
- (3) Off-site tracking of industrial materials or sediment where vehicles enter or exit the site;
- (4) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- (5) Evidence of, or potential for, pollutants entering the drainage system.

Results of both visual and any analytical monitoring done during the year must be taken into consideration during the evaluation. Storm water BMPs

E. Storm Water Pollution Prevention Plan

5. **Signature and Plan Review**

identified in the SWPPP must be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they must be inspected to see whether BMPs are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected if possible.

- b. Based on the results of the inspection, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I.E.2.b(3); revise the description of controls required by Part I.E.2.f to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed, within two weeks following the inspection, unless permission for a later date is granted in writing by the director. If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than 12 weeks after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the director;
- c. Compliance Evaluation Report. A report summarizing the scope of the inspection, name(s) of personnel making the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWPPP, and actions taken in accordance with Part I.E.4.c shall be made and retained as part of the SWPPP for at least three years from the date of the inspection. Major observations should include: the location(s) of discharges of pollutants from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II K; and
- d. Where compliance evaluation schedules overlap with routine inspections required under Part I.E.4.f(2)(a)(v), the annual compliance evaluation may be used as one of the routine inspections.

E. Storm Water Pollution Prevention Plan

5. **Signature and Plan Review**

- a. Signature/Location. The plan shall be signed in accordance with Part II.K, and retained on-site at the facility covered by this permit in accordance with Part II.B.2.
- b. Availability. The permittee shall make the SWPPP, annual site compliance inspection report, and other information available to the department upon request.
- c. Required Modifications. The director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this permit. The notification shall identify those provisions of the permit that are not being met, as well as the required modifications. The permittee shall make the required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the director, and shall submit a written certification to the director that the requested changes have been made.

6. **Maintaining an Updated SWPPP.** The permittee shall amend the SWPPP whenever:

- a. There is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
- b. During inspections, monitoring, or investigations by facility personnel or by local, state, or federal officials it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified under Part I.E.2.c or Part I.B.14, or is otherwise not achieving the general objectives of controlling pollutants in discharges from the facility.

7. **Special Pollution Prevention Requirements**

- a. Additional Requirements for Storm Water Discharges Associated with Industrial Activity that Discharge into or Through Municipal Separate Storm Sewer Systems

E. Storm Water Pollution Prevention Plan

7. **Special Pollution Prevention Plan Requirements**

- (1) In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under VPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the permittee has been notified of such conditions.
- (2) Permittees that discharge storm water associated with industrial activity through a municipal separate storm sewer system, or a municipal system designated by the director shall make plans available to the municipal operator of the system upon request.

b. Additional Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Requirements

Any potential pollutant sources for which the facility has reporting requirements under EPCRA Section 313 must be identified in the SWPPP in Part I.E.2.c (Summary of Potential Pollutant Sources). Note: This additional requirement is only applicable if the facility is subject to reporting requirements under EPCRA Section 313.

8. **Sector-Specific Storm Water Pollution Prevention Requirements – Chemical and Allied Products Manufacturing**

In addition to the requirement of Part I.E.2, the plan shall include, at a minimum, the following items.

a. Site Description

- (1) Site Map. The site map shall identify where any of the following may be exposed to precipitation/surface runoff: processing and storage areas; access roads, rail cars and tracks; areas where substances are transferred in bulk; and operating machinery.

E. Storm Water Pollution Prevention Plan

8. **Sector-Specific Storm Water Pollution Prevention Plan Requirements – Chemical and Allied Products Manufacturing**

- 2) Summary of Potential Pollutant Sources. A description of the following sources and activities that have potential pollutants associated with them: loading, unloading, and transfer of chemicals; outdoor storage of salt, pallets, coal, drums, containers, fuels, fueling stations; vehicle and equipment maintenance/cleaning areas; areas where the treatment, storage, or disposal (on-site or off-site) of waste/wastewater occur; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; areas where the transfer of substances in bulk occurs; and areas where machinery operates.

- b. Storm Water Controls. Nonstructural BMPs. Good housekeeping. At a minimum, the SWPPP shall:

- (1) Include a schedule for regular pickup and disposal of garbage and waste materials, or a description of other appropriate measures used to reduce the potential for the discharge of storm water that has come into contact with garbage or waste materials.
- (2) Include routine inspections of the conditions of drums, tanks, and containers for potential leaks.

PART II - CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Environmental Quality
West Central Regional Office
3019 Peters Creek Road
Roanoke VA 24019-2738

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

C. Reporting Monitoring Results (Continued)

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

G. Reports of Unauthorized Discharges (Continued)

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

I. Reports of Noncompliance (Continued)

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (540) 562-6700 (voice) or (540) 562-6725 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

K. Signatory Requirements (Continued)

4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

U. Bypass (Continued)

- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II U 2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II I; and
 - d. The permittee complied with any remedial measures required under Part II S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

W. Inspection and Entry (Continued)

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.